

Upcoming Meetings (2019)

- June 11 – Council meeting (S. Portland, ME)
- June 27 – PDT Conference Call (10am – noon)
- July 23, 2019 – In-person PDT meeting at Mariners House (Boston, MA – Mariners House)
- August 27 & 28, 2019 – In-person PDT meeting (Falmouth, MA - TBD)
- October 17 & 18 – SSC Meeting (Location TBD)
- Oct & Nov – AP and CTE meetings (1 each month)

Scallop AP and Committee Meetings

Jonathon Peros, NEFMC Staff

May 22 & 23, 2019
Scallop AP and Committee
Providence, RI



New England
Fishery Management Council

Today's Meeting:

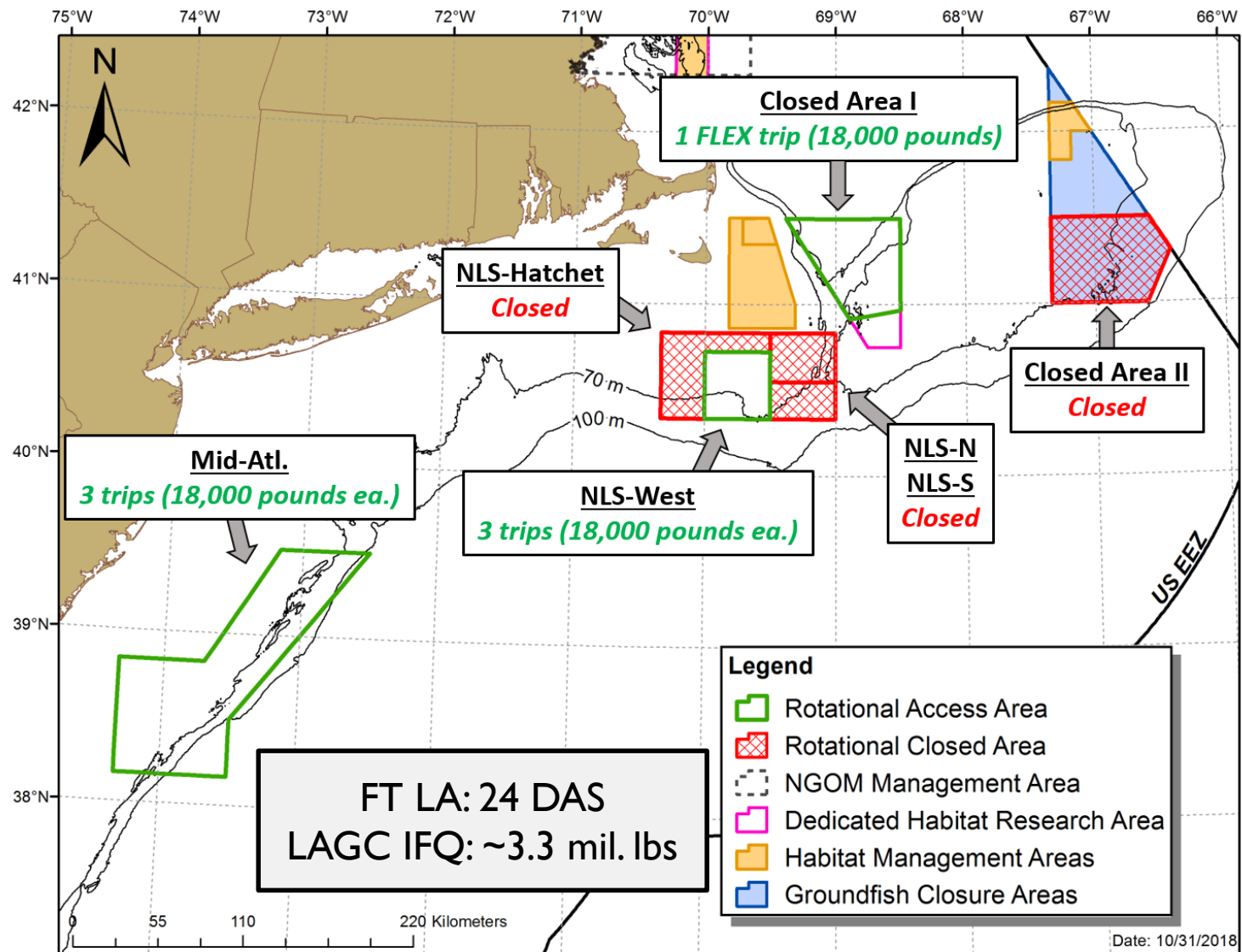
Objectives:

- Provide input: potential harvest of scallops in the NLS-S-deep
- Review A2I scoping comments and recommend next steps
- Develop recommendations: 2020/2021 RSA research priorities
- Develop recommendations: next steps for RSA Program review
- Provide input: approaches to mitigate impacts on YT flounder

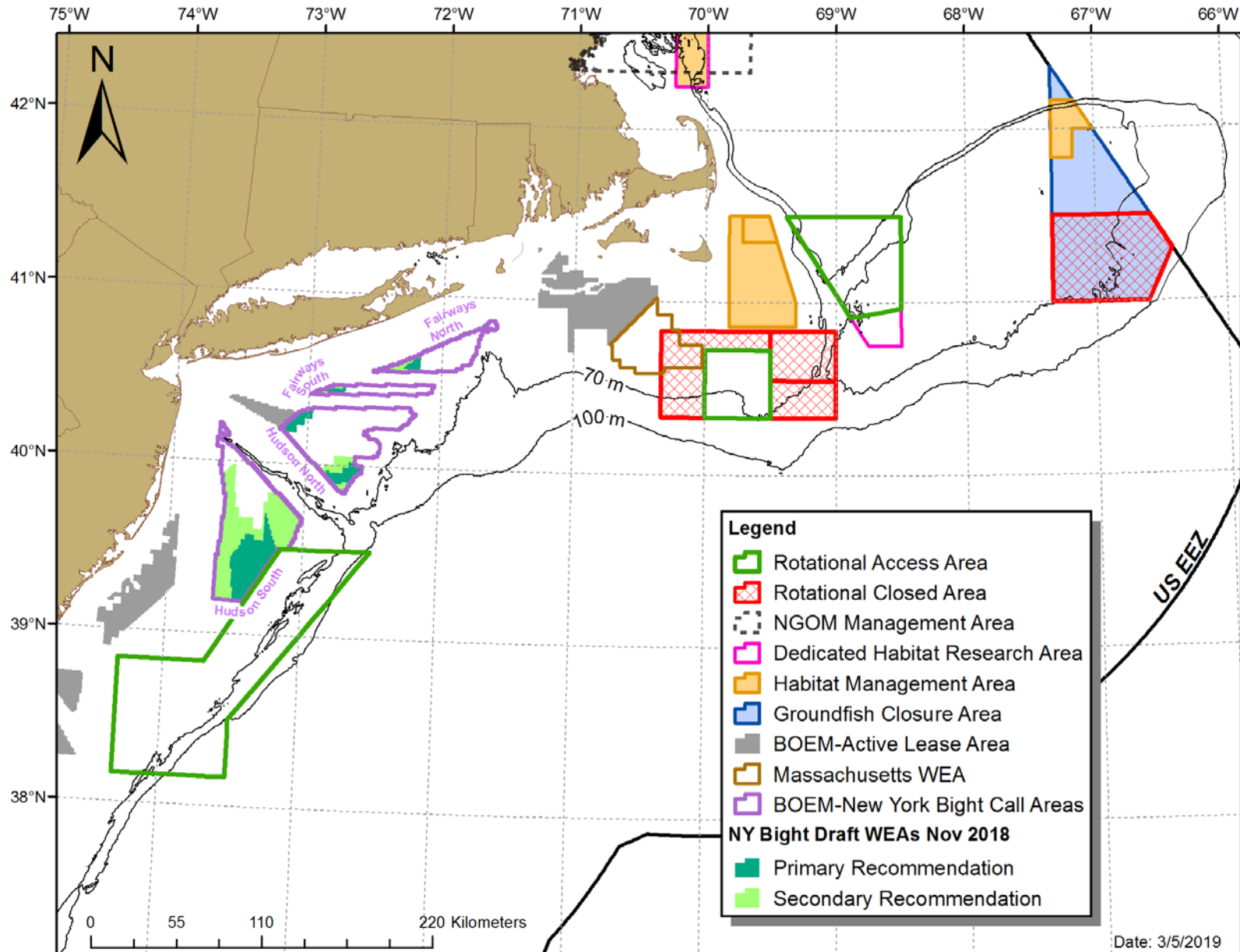
Meeting Outlook:

- Scallop Report at Council meeting will be Tue., June 11 at 3:00 pm

Update on Framework 30:



Management Areas with WEAs



2019 NGOM Fishery

- 137.5k pound TAC → Landings still being reported, final harvest not available
- Opened April 1 → Closed April 25
- 45 Active vessels in 2019
- Average trips per vessel: 17 (Max: 25)
- ME DMR dredge survey funded through RSA
 - Option to fish RSA lbs in NGOM

LPUE: 2010 - 2018

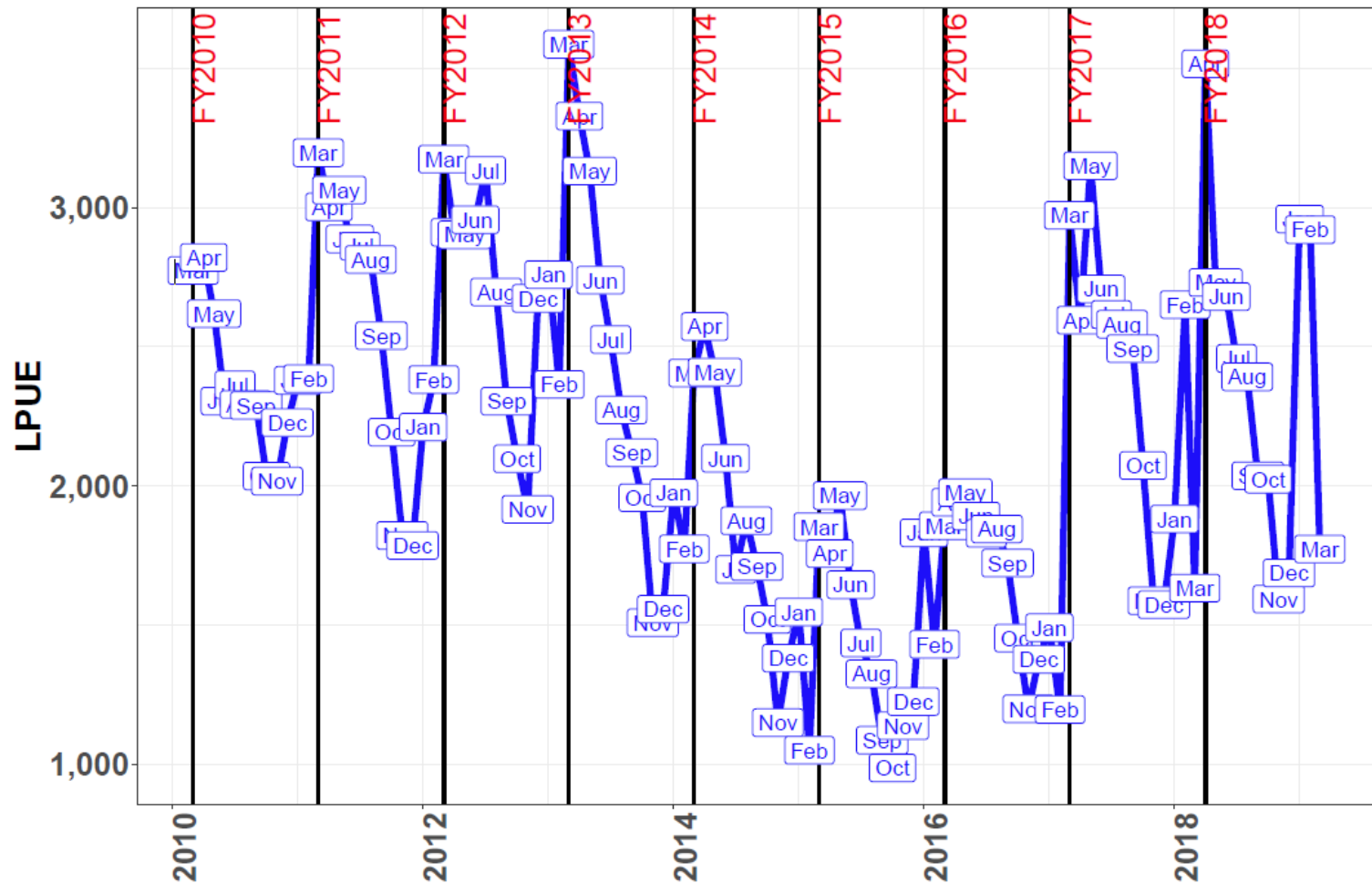


Figure 8: LPUE by month for Open Area Limited Access fishing. LPUE was calculated by dividing monthly scallop meat total landings by the days-at-sea charged.



I. NLS West and NLS-S-deep discussion

General Input from AP

NLS-West

- Thoughts on how FY 2019 has progressed?
 - Catch rates
 - Meat quality
 - Any seed around?
 - Bycatch

MAAA, CAI?

NLS-S Deep: Follow-up share day discussion

FOR DISCUSSION PURPOSES

- Anticipate busy agendas in Sept/Oct/Nov during the development of A2I & FW32.
- **Key Question: Do we want to harvest these scallops?**



YES

Or

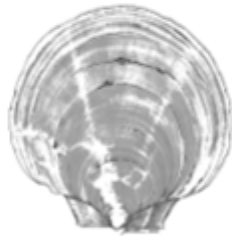


NO:
STOP

- Potential consideration for FW32:
 1. Allocate through 2020/2021 specifications action following the 2019 surveys. Consider in the context of all areas/allocations.
- OBJECTIVE: Create space for subsequent discussions. Then...
- Council could identify a range of measures to support harvest in NLS-S-Deep (i.e. crew limits, trip limits, etc.).

2. Amendment 21:

**SCOPING DOCUMENT
for
Amendment 21
to the
Atlantic Sea Scallop
Fishery Management Plan**



**(Northern Gulf of Maine and Limited
Access General Category Amendment)**

Prepared by the
New England Fishery Management Council

See Document 2g
Sam Asci Presentation



Amendment 21 : Next Steps

- Anticipate that the Council will direct work on A21 at its June meeting in South Portland, ME.

This meeting is your opportunity to suggest next steps for Amendment 21. This includes:

- Goals and/or objectives for each issue
- Request a range of alternatives be developed (by issue)
- Develop tasking for the Scallop PDT



Northern Gulf of Maine: *Potential objectives identified in the A2I Scoping Document*

Scoping Document (2d), page number “1”
Meeting Memo (1b), page number 3

- Support a growing directed scallop fishery in federal waters in the NGOM.
- Prevent unrestrained removals from the NGOM management area
- Allow for orderly access to the scallop resource in this area by the LAGC and LA components.
- Establishing mechanisms to set allowable catches and accurately monitor catch and bycatch.



LAGC IFQ Possession Limits & One-way Transfer of Quota from LA w/ IFQ to IFQ Only

Potential Objectives from the A2I Scoping Document :

Scoping Document (2d), page number “1”
Meeting Memo (1b), page number 3

- Improve overall economic performance of the LAGC IFQ component.
- Help ensure that the LAGC IFQ component remains profitable.
 - (promote profitability in the LAGC IFQ component of the fishery)
- Continued participation in the General Category fishery at varying levels.



Amendment 21: **Draft** Timeline

2019

- January: *Council Approved Scoping Document*
- Feb – April: *Scoping Period, 10 Scoping Meetings*
- June: Review scoping comments; develop goals/objectives
- Sept or Dec 2019: Approve Range of Alternatives

2020

- January - March: Writing A21 and FW31/specs impacts
- April: Approve document for hearings, select preferred alts.

Key Issue: Will there be significant effects? (NEPA)

- *Process could go faster if only an EA is required.*
- *EIS process: target implementation no later than April 2021.*



Amendment 21: Draft Timeline

Month	Amendment 21	Framework 32
June	Goals/objectives, Alts	GBYT, NLS-S?
July	PDT develop alternatives	Mgmt measures, GBYT memo
August	PDT develop alternatives	Survey results, specs
September*	Review progress	Combine surveys, develop SAMS runs
October	Refine alternatives	SSC, Refine SAMS
November	CTE approve range Alts	Select preferred
December	Approve range alts	Final Action FW32

*Council begins developing 2020 work priorities



3. Scallop RSA

Background

- Scallop RSA program began in 1999
- Evolved over time but overall 1.25 million pounds set-aside each year to fund research projects (over \$10mil)
- About 10-15 projects are funded annually
- At least biennially the Council recommends the research priorities that are used in the funding announcement
- **Goal for today**
 - I. Develop input for RSA research priorities for 2020/2021



Scallop RSA Process

- Process coordinated by NEFSC and NEFMC
- No federal funds – awards in pounds of scallop – allocated through competitive grants process
- Council (typically) recommends priorities at June meeting for summer announcement
- Management and Technical Reviews
 - NMFS convenes a **management review panel** meeting with Council members and technical experts to discuss relevance of each project. Reviewers submit individual comments; no consensus recommendations are made.



Scallop RSA - Technical Review Process

- **Two tracks.**
- **Non-survey Proposals:** Each proposal reviewed by three subject matter experts that score technical merits (importance/relevance, technical merit, qualifications, costs, outreach)
- **Survey Proposals:** Separate technical panel convened to review survey proposals
 - Technical experts review all survey proposals (NMFS and non-federal scientists)
 - **No consensus:** Individual comments and scores are submitted by each reviewer



Scallop RSA Process (cont.)

- Successful applicants may be asked to refine/modify project to better fit priorities/management needs.
- Priority given to higher technically ranked proposals, although additional factors such as management relevance, project needs, and cost effectiveness may be considered.
- Common scallop price determined by NMFS based on best and most recent data to determine set aside allocation.
 - \$9.50 for 2019/2020. Recent auction prices around this value.
- Awards in pounds, can be harvested from any area open to fishery unless FMP prohibits it.



RSA Common Price

- Common Price is set annually by NEFSC.
- Council staff provide input:
 - Model based or review of domestic fishery data and imports/exports
- RSA program review recommendation to formalize this process.
 - PDT support

Year		Common Price
2009		\$7.55
2010	→	\$7.55
2011	↑	\$7.64
2012	↑	\$9.42
2013	↑	\$9.75
2014	↑	\$10.50
2015	↑	\$12.00
2016	→	\$12.00
2017	→	\$12.00
2018	↓	\$10.50
2019	↓	\$9.50



2019/2020 RSA Awards



New England Fishery Management Council

FOR IMMEDIATE RELEASE
May 7, 2019

PRESS CONTACT: Janice Plante
(607) 592-4817, jplante@nefmc.org

Scallop Research Set-Aside Program Supports 13 Projects for 2019-2020; Resource Surveys Once Again Top the List

The Atlantic Sea Scallop Research Set-Aside (RSA) Program will support 13 projects during the 2019-2020 award cycle that address resource surveys, dredge efficiency, bycatch reduction, fishery impacts on loggerhead turtles, potential offshore wind development impacts on larval and juvenile scallop transport, and more (see table on page 2 for full list). The projects focus on scallop research priorities identified by the New England Fishery Management Council, which ranked resource surveys as the highest priority.

The awards were announced [today](#) by the NOAA Fisheries Northeast Fisheries Science Center. Collectively, these awards are expected to generate more than \$14 million. This includes an estimated \$2.8 million to fund the research and \$11.4 million to compensate industry partners who harvest set-aside quota. No federal money is involved, making this a true industry-funded program.

- The New England Council approved research priorities in June 2018 for the [2019-2020 RSA projects](#).
- The Council will develop a new list of priorities at its June 2019 meeting for 2020-2021 projects.

The Council established the Scallop RSA Program to address research questions that support management of the scallop resource. Each year during the specification-setting process, the Council “sets aside” 1.25 million pounds of scallops to carry out RSA projects. The work is conducted collaboratively between

fishermen and scientists. Research results directly contribute to stock assessments and help the Council better manage the fishery overall.

While the Council sets the annual research priorities, NOAA Fisheries manages the RSA competition and administers the program.



The Barnegat Light, NJ-based F/V Kathy Ann is a long-time contributor to cooperative research under the Scallop RSA Program. — Jonathan Peros/NEFMC photo

Learn More on the
[NEFSC RSA Webpage](#)
and View the
[Award Announcement](#)

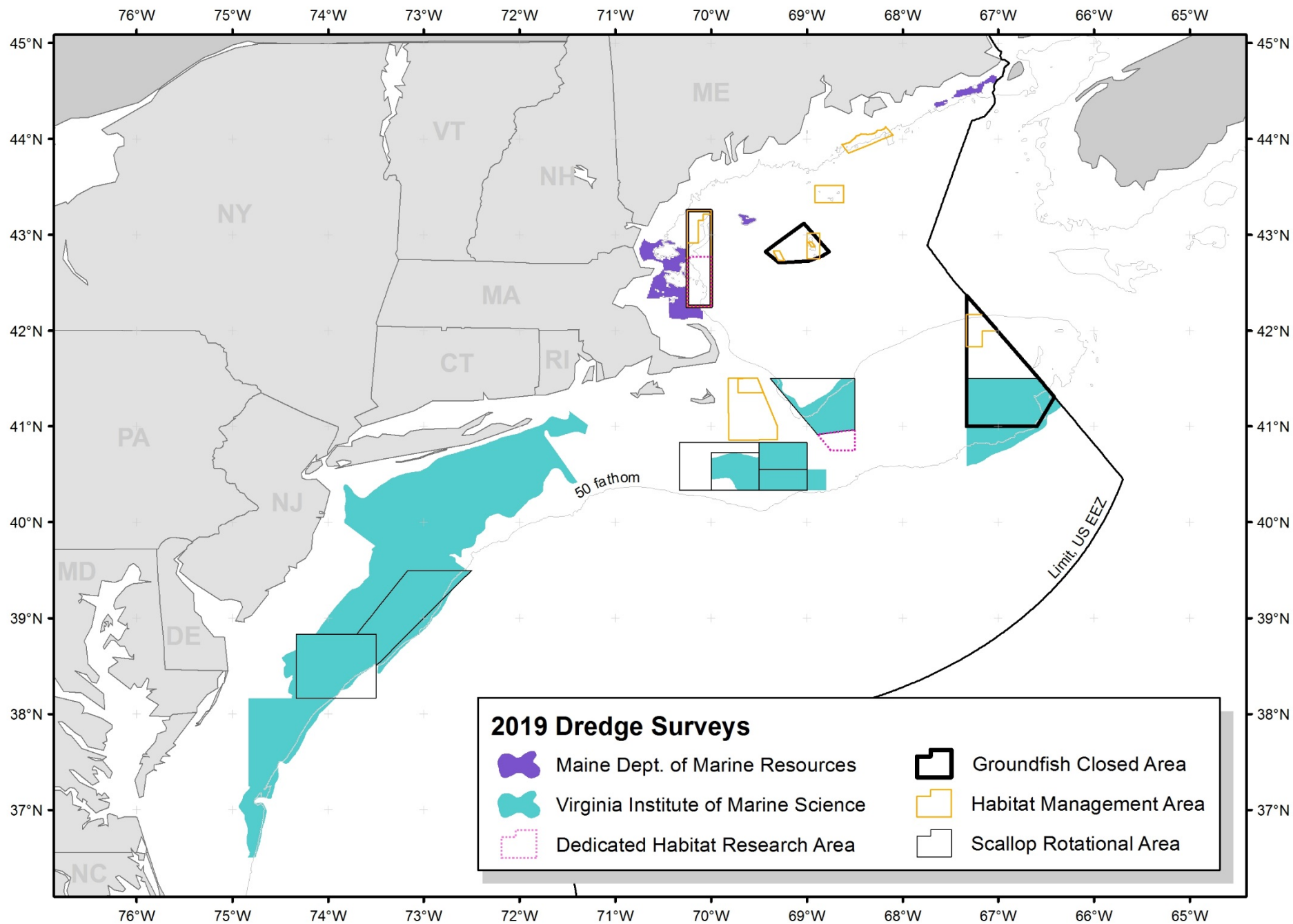
- Announced on May 7, 2019
- 13 projects recommended for funding, PIs from 6 organizations
 - Surveys (dredge, drop camera, HabCam)
- 1.25+ mil. lb set-aside expected to generate ~\$14 million dollars - ~\$2.8 to fund research, ~\$11.4 in compensation fishing (\$9.50)
- 3 projects funded for two years

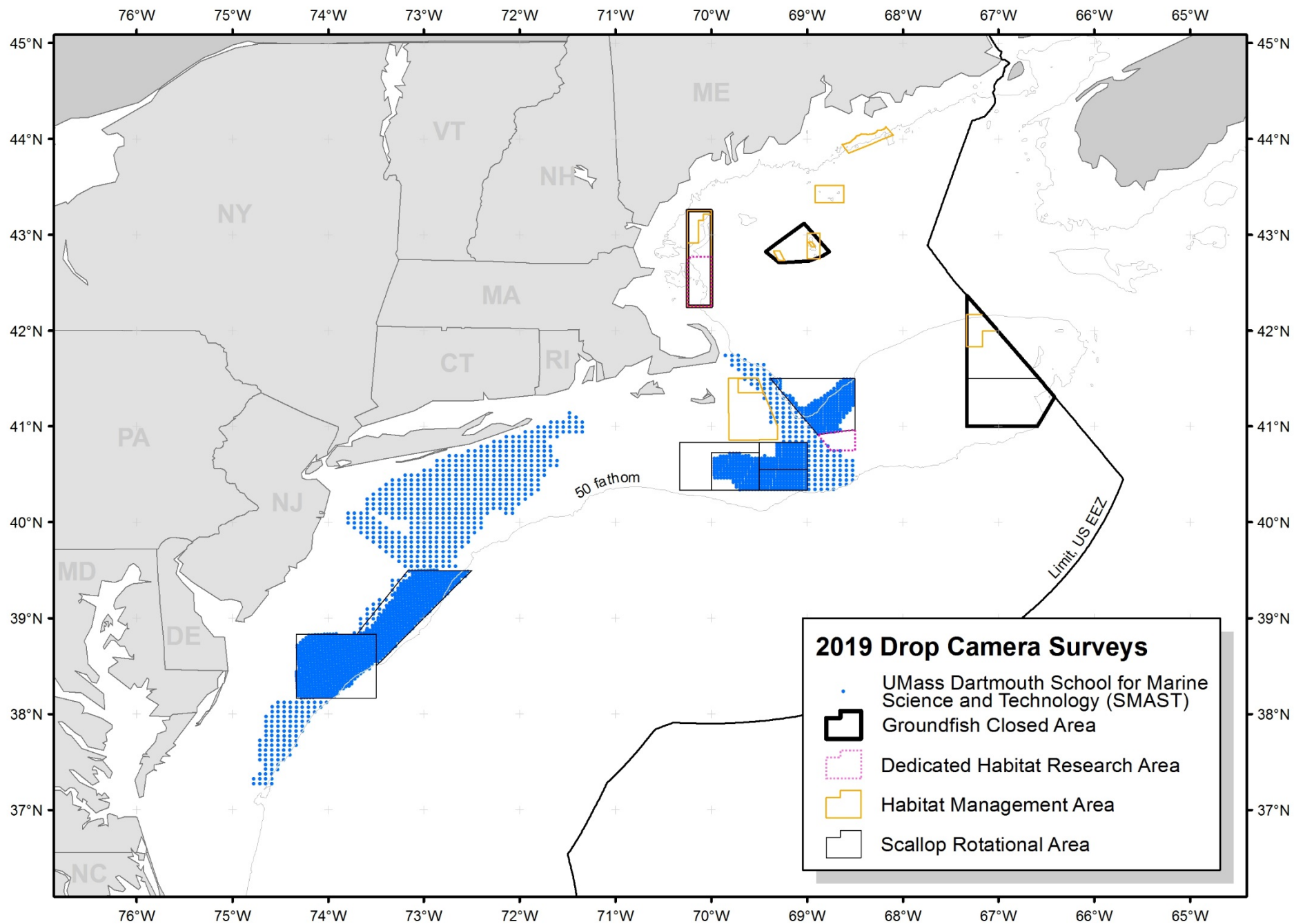
2019/2020 Scallop RSA Awards

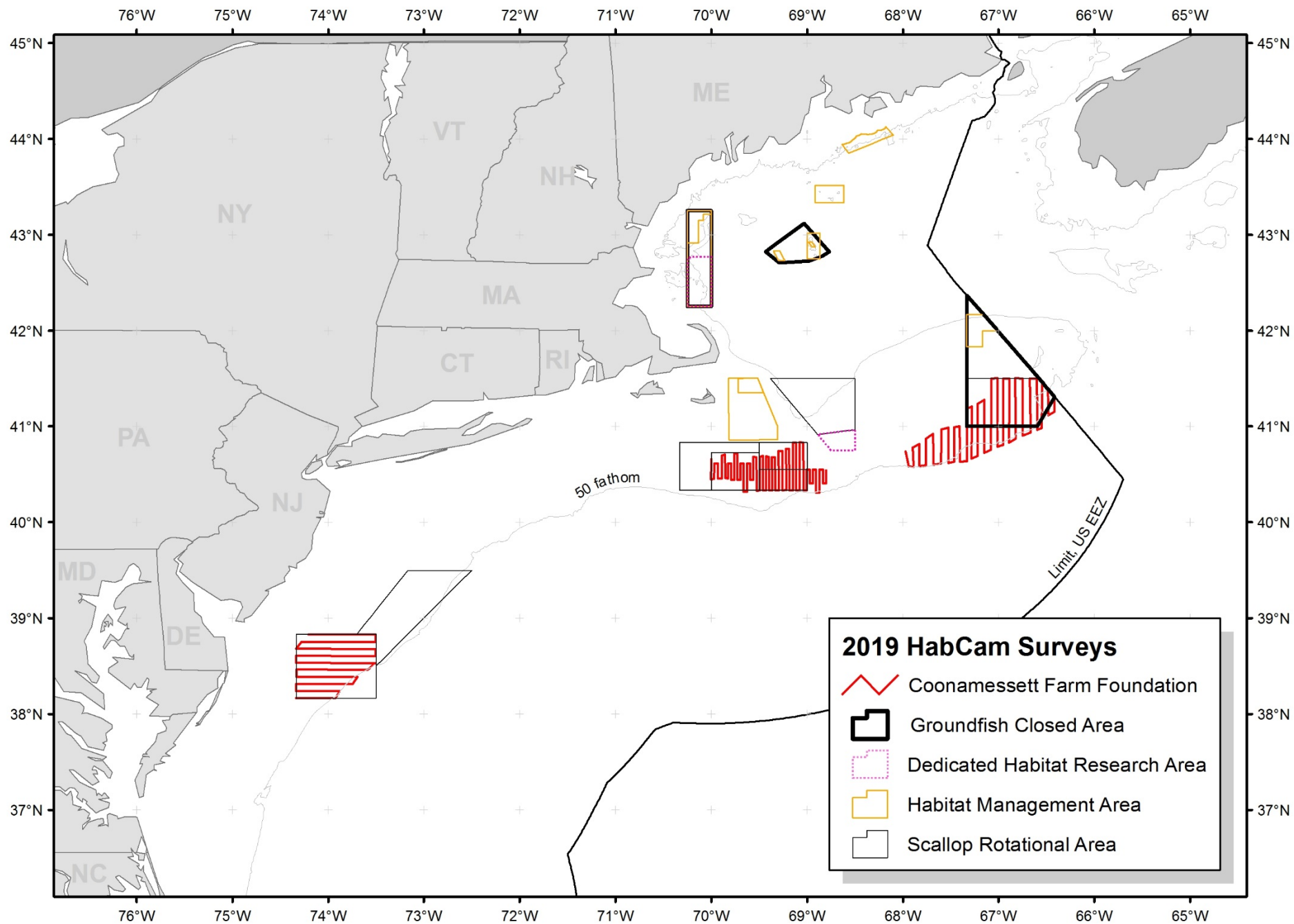
Priority	Priority Rank	Projects Funded	Research Cost
Survey*	Highest	8	\$1,680,542
Bycatch	General	3	\$728,589
Wind	General	1	\$276,573
Turtle	General	1	\$146,104
Total		13	\$2,831,808

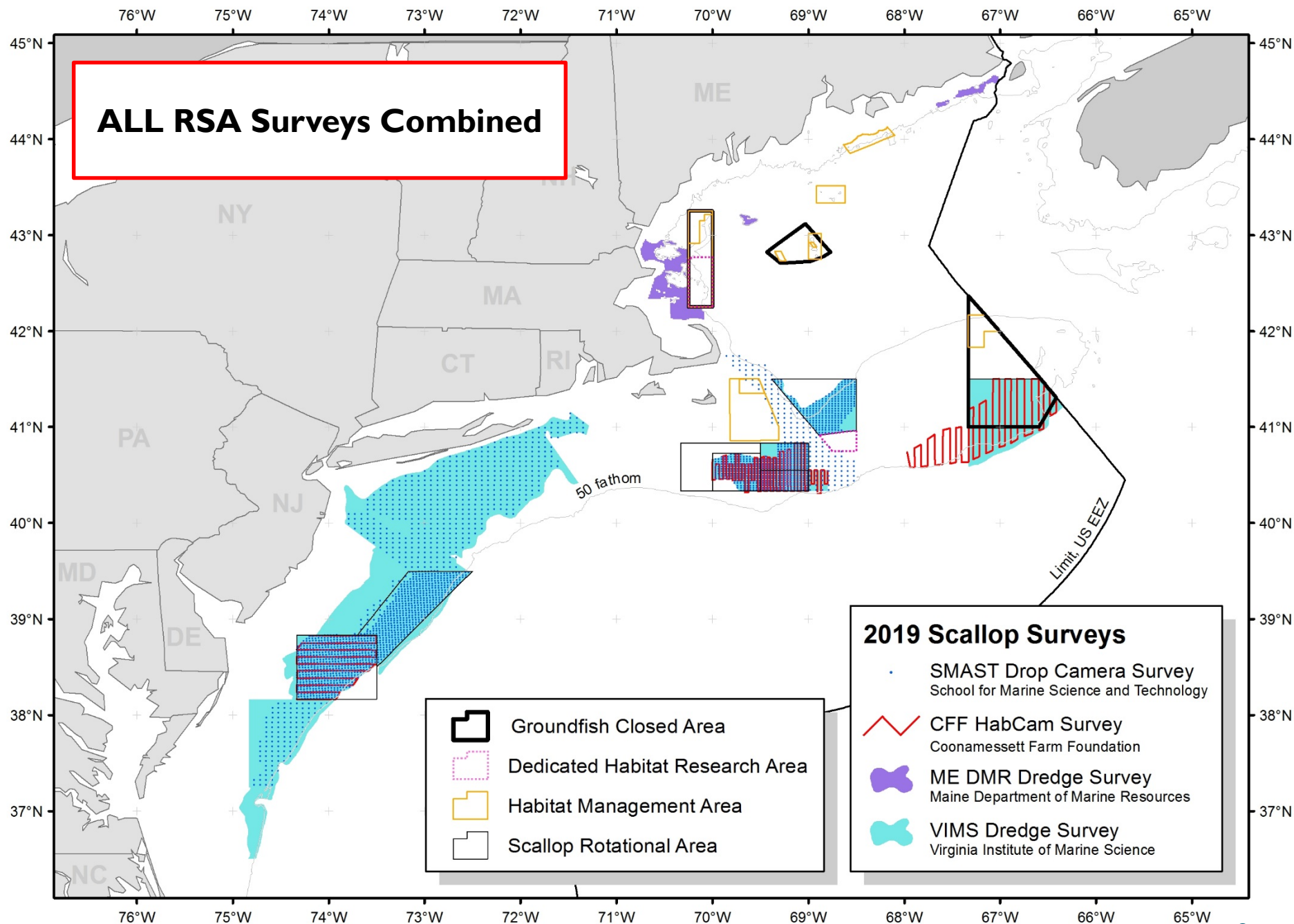
*Survey values include dredge efficiency and deep learning/image annotation projects











2018 Council RSA Recommendations

- **FULL TEXT: Document 4d (2019/2020 FFO)**
- **HIGH** – *In order of importance (Surveys highest priority)*
 - 1a & 1b: access areas and areas of interest
 - 1c: Broadscale surveys of Mid-Atlantic and Georges Bank
 - 2: Variability in survey dredge efficiency
- **General Research Topics – *Of Equal Importance***
 - 3. Impact of offshore wind development on scallop resource
 - 4. Turtle behavior in the Mid-Atlantic & Georges Bank
 - 5. Bycatch: small scallops and non-target species
 - 6. Scallop Meat Quality
 - 7. Management Strategy Evaluation (MSE) Research
 - 8. Scallop Biology Research: age and growth, M, GOM

Scallop Surveys: PDT Input

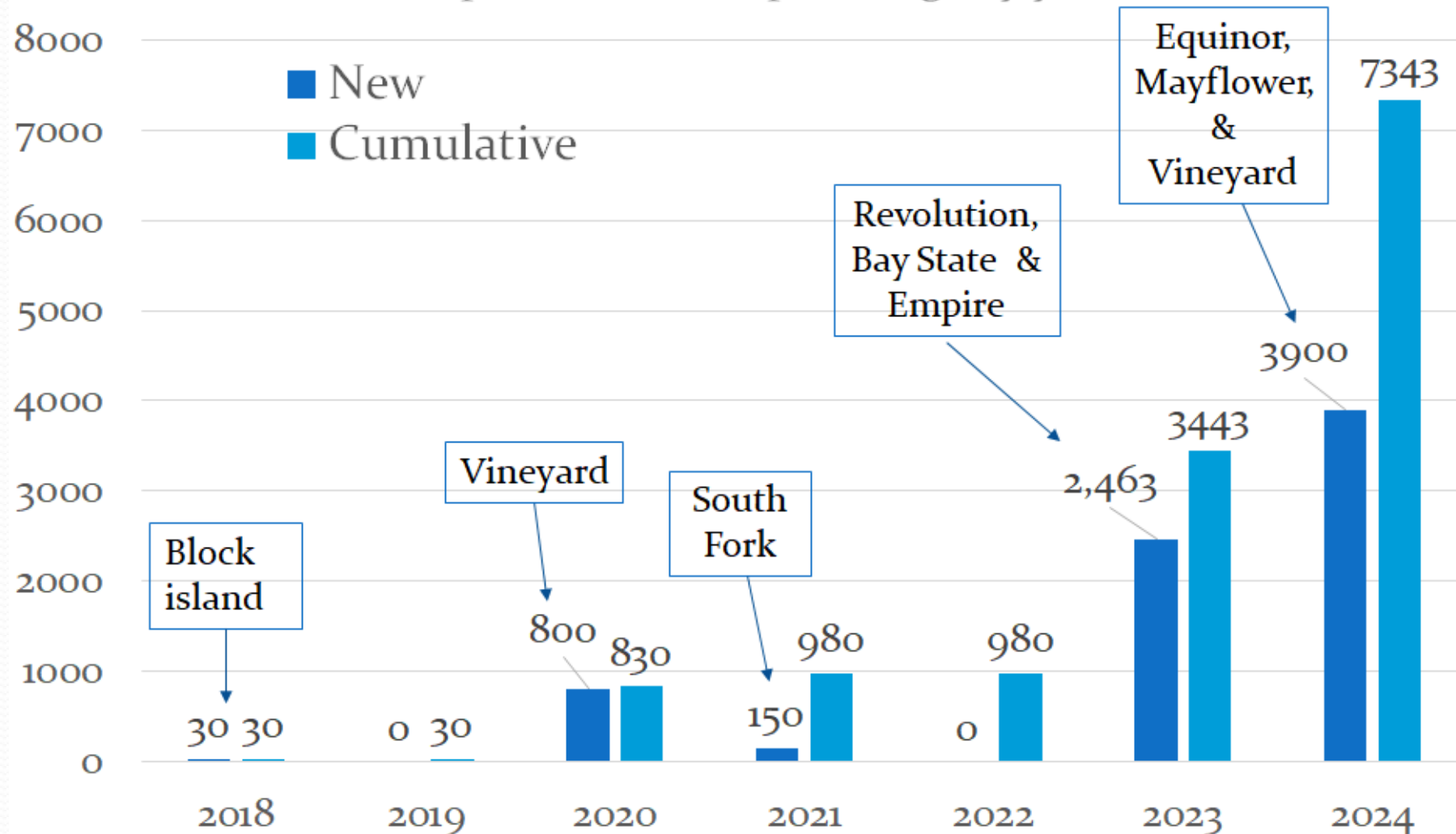
- See Document 4c
- **Surveys remain a high(est) priority –**
- Ia. Cut duplicative text
- Ib: “areas of interest” → areas where recruitment observed in 2019 surveys; keep GOM surveys in this section
- Ic: Broadscale surveys of Mid-Atlantic and Georges Bank
- 2: Variability in survey dredge efficiency → NOT HIGH
 - Several projects have been funded in recent years (2017 - 2019)
 - Results can support management, but time to re-evaluate?
- New language suggested:

“An evaluation and synthesis of dredge efficiency research to support scallop fishery management. Research may focus on analyses of existing data sets.”

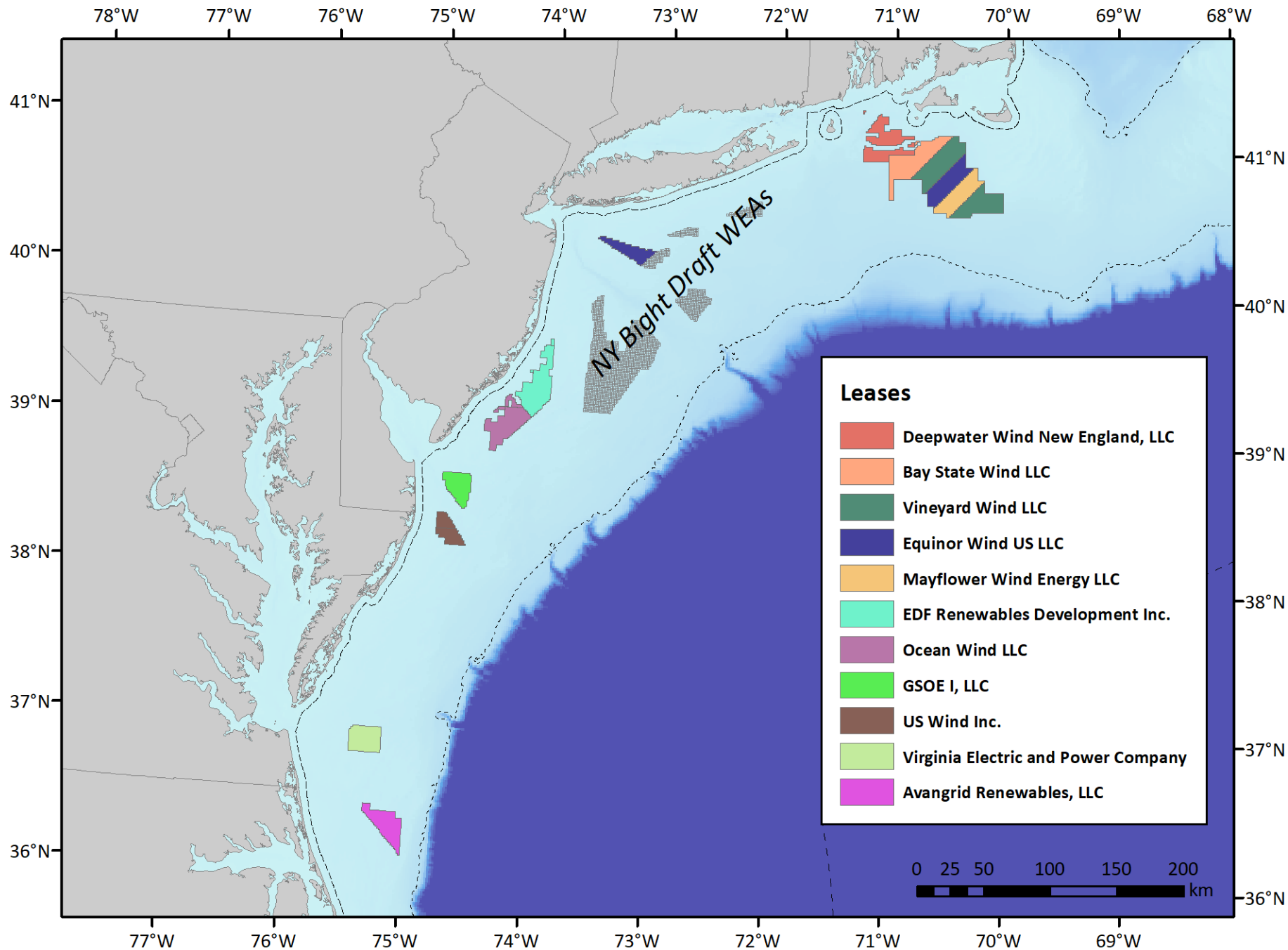
General Research: PDT Input

- See Doc. 4c
- **General Research Topics** – Support for this grouping vs. H, M, O
- **3. Impact of offshore wind development on scallops**
 - New, expanded language was suggested for this FFO
 - One project funded in 2019 – Larval dispersal FVCOM
 - Against: Developers or BOEM should pay for this work. RSA should be for scallop specific work
 - Opportunity to do in-depth research, developers doing minimum
 - Council is following wind energy closely through Habitat CTE
 - 5/9 PDT call: Example of need to determine role of RSA.

Offshore Wind Energy, New England & New York planned and operating, by year



Source: MW and estimated operation timelines for projects based on U.S. Department of Energy, Offshore Wind Market Update (Sept 2018), Business Network for Offshore Wind, Market Update and Insights (March 2019), and individual developer websites.



General Research: PDT Input

- See Doc. 4c
- 4. Turtle behavior in the Mid-Atlantic & Georges Bank
 - Area of focus: Shifts in distribution due to climate change.
 - Research being presented at RSA Share Day.
 - Interest in how data is being used in management → BiOp?
- 5. Bycatch: small scallops and non-target species
 - Interest in understanding what has been tried and tested
 - Bycatch 2nd highest funded priority area behind surveys
- 6. Scallop Meat Quality
 - Support through RSA & SK
 - Refine priority to focus on density dependence.
- 7. Management Strategy Evaluation (MSE) Research
- 8. Scallop Biology Research: age and growth, M, GOM

General Research: PDT Input

- See Doc. 4c
- 7. Management Strategy Evaluation (MSE) Research
 - Suggestion to take out this cycle, re-evaluate in the future
- 8. Scallop Biology Research: age and growth, M, GOM
 - Several research tracks embedded in this priority
 - Reorganize?
 - Add “Discard mortality” to be consistent with 2019-2023 priorities

General Research: PDT Input

- See Doc. 4c
- **NEW? Data collection in the Gulf of Maine:** This priority includes research aimed at developing approaches for determining optimal survey coverage, frequency, and design in Gulf of Maine. This may include research that evaluates past and current approaches to survey design in the Gulf of Maine (not just the NGOM management unit). This priority may also include projects that evaluate the cost-benefits of research survey design including coverage, frequency, timing, and survey gear, and monitoring the fishery (landings and discards) relative to the net socioeconomic benefits. Possible research includes, but is not limited to, evaluation of past and current approaches to survey design in the Gulf of Maine (not just the NGOM management unit) and simulation modelling.

AP and Committee Input

- Questions?
- Council will consider Committee recommendations during the Scallop Report on June 11, 2019





4. RSA Program Review

Scallop Committee Only
AP discussion at RSA Share Day

RSA Review Panel

Dr. Michael Sissenwine, Chair (NEFMC)

Ms. Deirdre Boelke (NEFMC)

Mr. Ryan Silva (GARFO)

Ms. Susan Olsen (GARFO)

Ms. Cheryl Corbett (NEFSC)

Dr. Dan Hennen (NEFSC)

Mr. Brandon Muffley

(MAFMC, Representative/Observer)

Executive Committee Guidance (ToR) Issued February 2018 (Appendix II)

- RSA widely viewed as successful, but Council and NMFS agreed to conduct review as a matter of good governance.
- Categories of ToR (24 individual questions)
 1. Program Administration
 2. Program Structure
 3. Results
- Consensus not required – present all ideas.

Review Methodology

- One year process interrupted by gov. shutdown!
- Based on:
 - Knowledge and experience of review panel
 - Written documents about RSA
 - Communications with PDTs, APs, Committees
 - On line survey (55 responses – 40 questions)
 - Select confidential interviews (20+)
- Report outline designed to address ToR.
- Review panel held about a dozen webex meetings.
- Face to face meeting to prepare Findings and Recommendations (*Note: not consensus on all rec's – rich diversity of ideas more valuable*).

Review Panel Findings

Finding 1. Research Set Aside programs performing well, and generally regarded as highly successful, especially the Scallop RSA program.

Finding 2. Concerns about several aspects of RSA (10)

Finding 3. The role of RSA is unspecified.

Finding 4. Sea scallop surveys lack an overall design.

Finding 5. Implementing RSA programs generates a substantial administrative workload.

Finding 6. One or more of the current RSA programs may no longer be viable, but other species may be candidates for RSA programs in the future.

RSA Program Review Discussion at Share Day

- D. Boelke Presentation & Review Panel Comments
- Scallop PDT input (Doc. 3d & Matrix responses)

Group Discussion: What Next?

- Which recommendations do you agree with?
- Which ones do you disagree with?
- Which ones should the Council try to address first?
(Matrix provided in Doc. 3d)

Following the meeting: Staff report to Scallop Committee

1. Agree/Disagree with initial input?
2. Broader discussion



What recommendations do you agree with?

PDT Input – See Doc.3a

- “**Finding 1.** The New England Council’s Research Set Aside programs are performing well, and are generally regarded as highly successful, especially the Scallop RSA program.”
 - Agree.
- **Recommendation 3.** To clarify the role of RSA, the NEFMC should adopt a mission statement for RSA.
 - Agree:Very Important/Short Term
 - PDT had questions around review panel input about what that statement might exclude.

Agree?

Disagree?

Administrative Burden

PDT Input via Recommendation Matrix

- **Finding:** Implementing RSA programs generates a substantial administrative workload
- **Rec 5.** NMFS, in consultation with the Council, should evaluate and document RSA program administrative capacity to determine where support is sufficient and where it could or should be increased; the RSA review panel supports a dedicated evaluation of resources
 - Very important (n=3)

Agree?

Disagree?

Recommendation 2.6: Priority Setting

PDT Input via Recommendation Matrix

- **2.6.a** NMFS and NEFMC should prepare a detailed time table for steps from priority setting to awarding RSA grants
 - Important (n=1), Very Important (n=4)
- **2.6.b** NEFMC should consider initiating the priority setting process earlier in the year esp. if the priority setting process becomes more intensive
 - None (n=4)

Agree?

Disagree?

Recommendation 2.4: Price Estimates

PDT Input via Recommendation Matrix

- **2.4.a.1** Establish standard procedures on how to specify value estimated for each program.
 - Important (n=2), Very Important (n=2)
- **2.4.a.2** Identify mechanisms to respond to inaccurate price estimates, develop guidelines for when and how these would be used, and guidelines for multi-year grants.
 - Less-important (n=1), Important (n=2), Very Important (n=2)

Agree?

Disagree?

Recommendation 2: Tracking, process

PDT Input via Recommendation Matrix

- **2.1.b.** PDTs with NEFSC identify status of each priority, continued need, specific deliverable needed, and when it may be time to remove items from the list.
 - Very Important (n=3)
- **2.2.a** NMFS should improve communications about RSA process.
 - Important (n=2), Very Important (n=3)

Agree?

Disagree?

Increase value of RSA Program 2.4.a/b

PDT Input via Recommendation Matrix

- **2.4.b.1** Scallops - Transfer between years or extend the 3 months RSA carryover provision
 - None (n=2), Less-important (n=1), Important (n=1)
- **Mixed input** for RSA reserve, transfer between years, additional compensation for fishing incentives.
 - None → Important

Agree?

Disagree?

2.8: Feedback into management

PDT Input via Recommendation Matrix

- **2.8.b Advisory Committee** could be established for each award with **NMFS/Council staff, etc.** to provide input throughout the project on ways to increase utility of the project and to identify ways the results can be integrated more effectively; at a minimum 1 NEFSC staff could be assigned to each project to ID if there are ways to enhance results utility
 - No support (n=3)
- **2.8.d** More formal communication of progress reports could be shared with PDT, Advisory Panels, and Committees to improve monitoring/accountability or RSA awards
 - Important → Very important

Agree?

Disagree?

Scallop Surveys: Findings & Recommendations

Finding: Sea scallop surveys, which are the largest and most enduring RSA activity, lack an overall design, which likely does not optimize resources and scientific potential

Rec. 4: A series of options for improving the efficiency and effectiveness of resource surveys for scallops should be considered (next slide)

Agree?

Disagree?

Scallop Surveys: Recommendation 4

- **4.1.a** Annual meeting to coordinate survey activity after selection or awards, between NMFS and grantees
- **4.1.b** Expand role of scallop survey technical review panel to consider design and implementation
- **4.1.c** Extend duration of multi-year grants (up to 5-years) to facilitate stability in sea scallop survey design
- **4.2** Re-establish the scallop survey advisory panel with the primary charge of designing an overall strategic approach
- **4.3** Cooperative agreement to prepare a statistically rigorous (i.e. model based) design for Scallop Surveys
- **4.4** Use a relatively long term cooperative agreement to design and implement Sea Scallop Surveys
- **4.5** Establish a long term Cooperative Agreement for Research Set Aside Programs (CARSAP)

Next Steps:

- General Comments? Questions?
- Report planned at Council (Tuesday, June 11 at 5pm)
- Looking for Committee motion(s) on:
 1. Recommendations that the Council should try to address first.
 2. Other items/concepts to advance (or not pursue)



Mitigating impacts to GB yellowtail

Sam Asci, Council Staff

Scallop AP—May 22, 2019
Scallop Committee—May 23, 2019



New England
Fishery Management Council

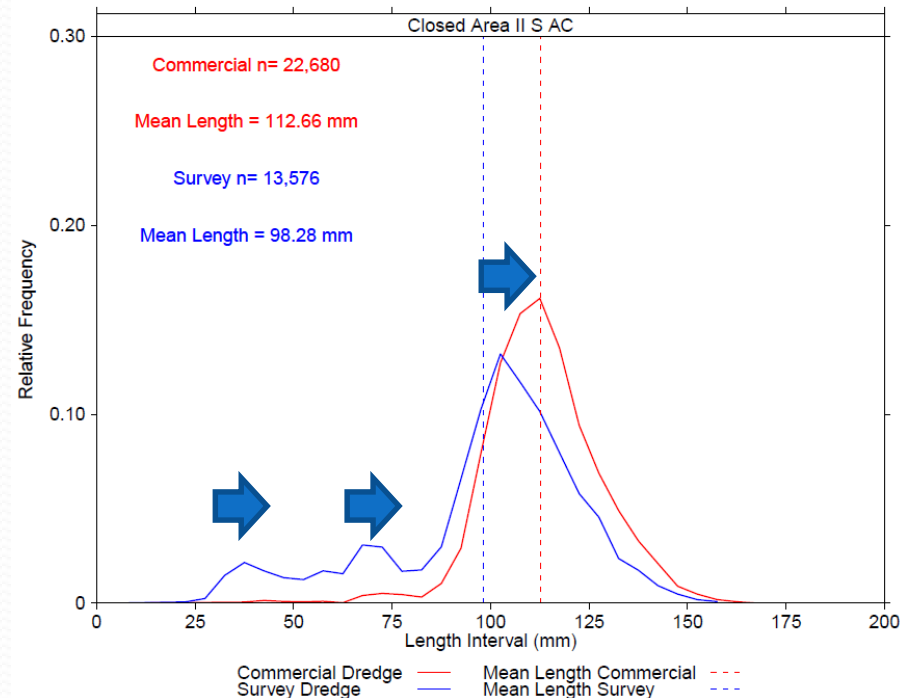
Mitigate Impacts on Yellowtail Flounder

- Identified as a 2019 work item in December.
- **Committee Tasking** in January 2019
- PDT discussion in April 2019

Stock	FY 2018 Sub-ACL	FY 2019 Sub-ACL	% Change
GB Yellowtail Flounder	33 mt	17 mt	-48%
SNE/MA Yellowtail Flounder	5 mt	15 mt	+200%
GOM/GB Windowpane	18 mt	18 mt	No Change
SNE/MA Windowpane Flounder	158 mt	158 mt	No Change

Closed Area II outlook

- Anticipate that Closed Area II can support access area fishing in FY 2020.
- 3 cohorts in the area, growth since 2018 surveys.
 - *PDT Sensitivity*: ~5 million pounds of scallop harvest was estimated to result in 10.4 mt (~22,900 lbs) of YT bycatch
 - PDT does not think that the scallop fishery will catch entire US share of the TAC



Jan 18, 2019 Committee tasking

Motion #4: Hughes/Patterson

The Committee tasks the PDT with analyzing the options for reducing bycatch of Georges Bank Yellowtail Flounder. This should include evaluating:

- Seasonal closures
- Analyze hanging ratios down to 1.5:1

Rationale: Given the poor status of Georges Bank yellowtail founder, there is a need to continue to find ways to reduce bycatch to mitigate impacts on the stock.

The motion carried on a show of hands: (11/0/0)

Existing analysis (FW29)

Reviewed by PDT on 4/4/19

FW29 Appendix II—Flatfish AM development:

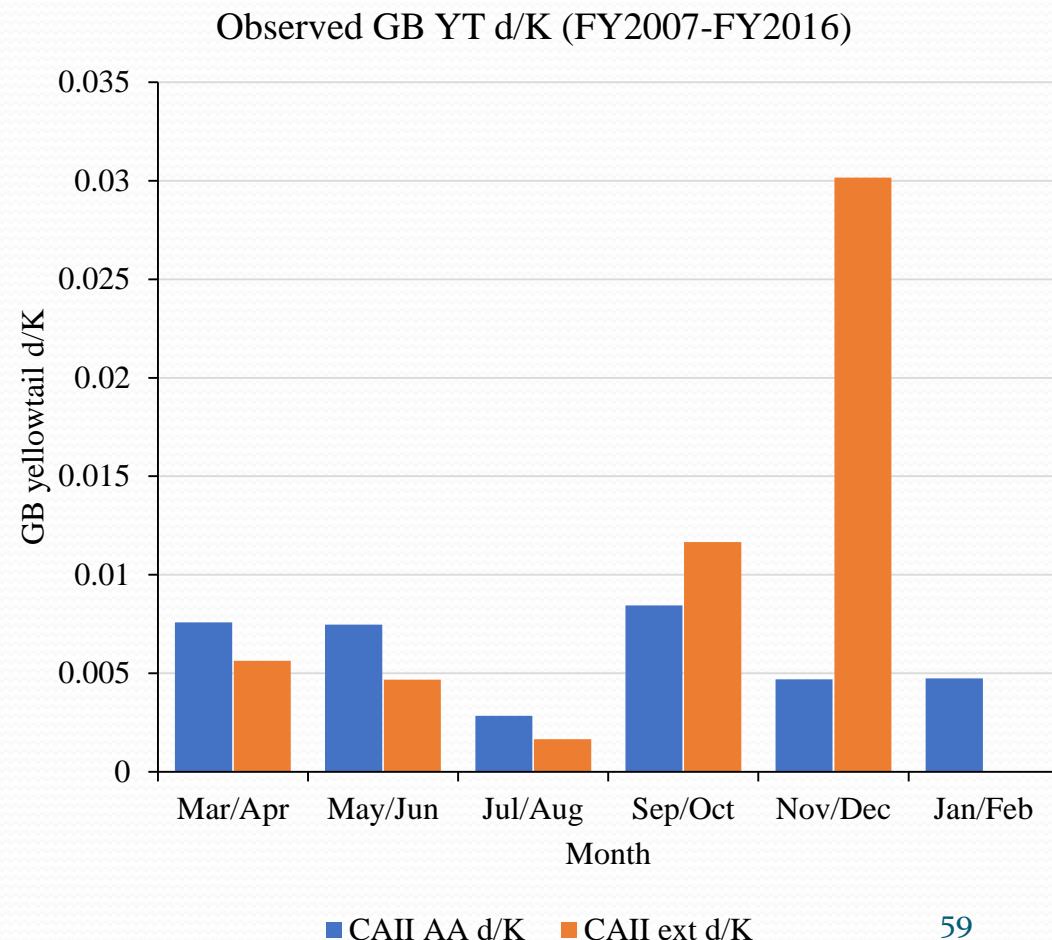
- Characterized GB yellowtail bycatch seasonality
- Evaluated bycatch savings of reactive AMs:
 1. GRA (5-row apron with 1.5:1 max hanging ratio)
 2. seasonal closure (Closed Area II and extension)
- Informed typical hanging ratios used by year/area fished

GB yellowtail seasonality

FW29 Appendix II— Flatfish AM Development

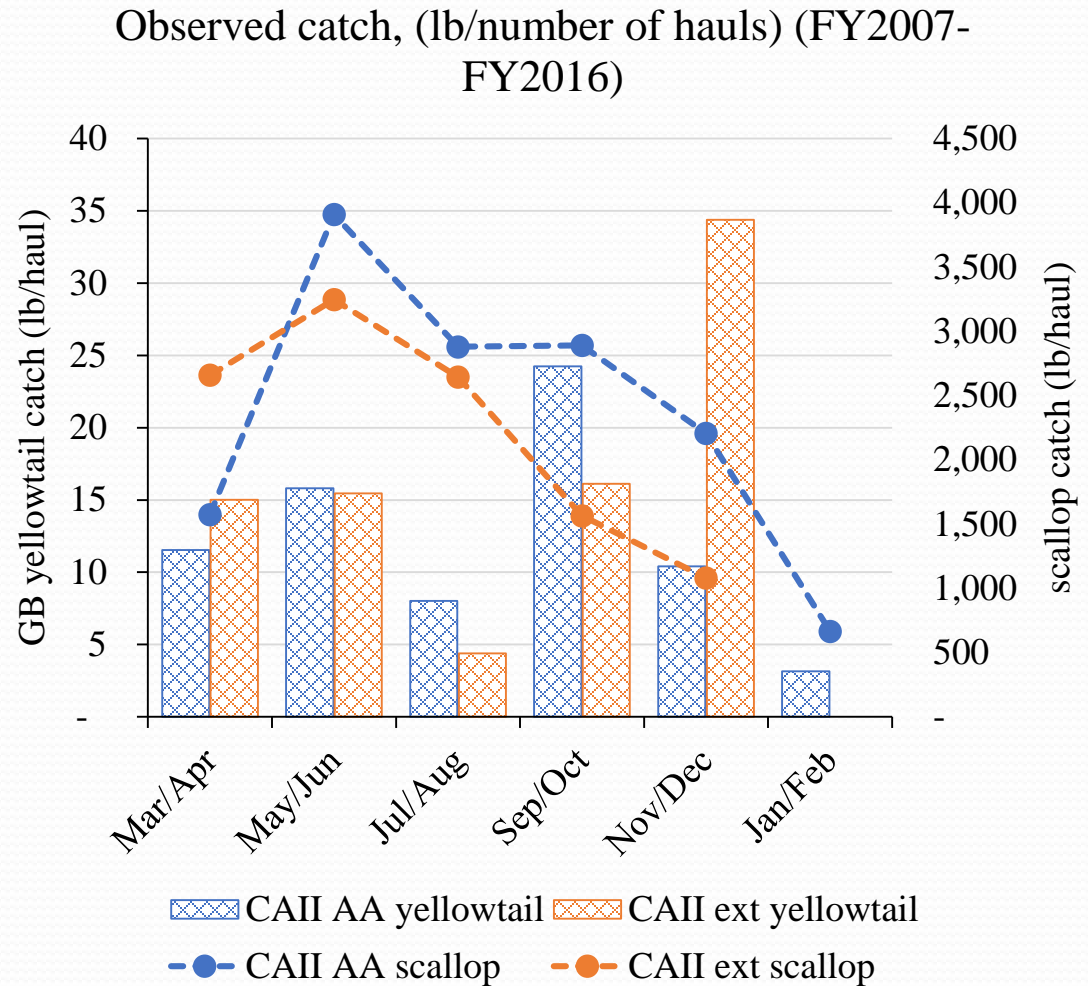
- GB yellowtail d/K in CAII AA (blue) and CAII-ext (orange).
- GB yellowtail d/K in CAII-ext at highest in Sep-Dec

Figure 16. Observed bimonthly yellowtail d/K in Closed Area II AA (blue) and Closed Area II extension (orange). Data used were from FY2007-FY2016.



GB yellowtail bycatch seasonality

- Haul level GBYT catch similar between CAII and CAII ext except for Nov/Dec.
- High d/K in CAII ext driven by poor fishing as opposed to remarkably high yellowtail bycatch.



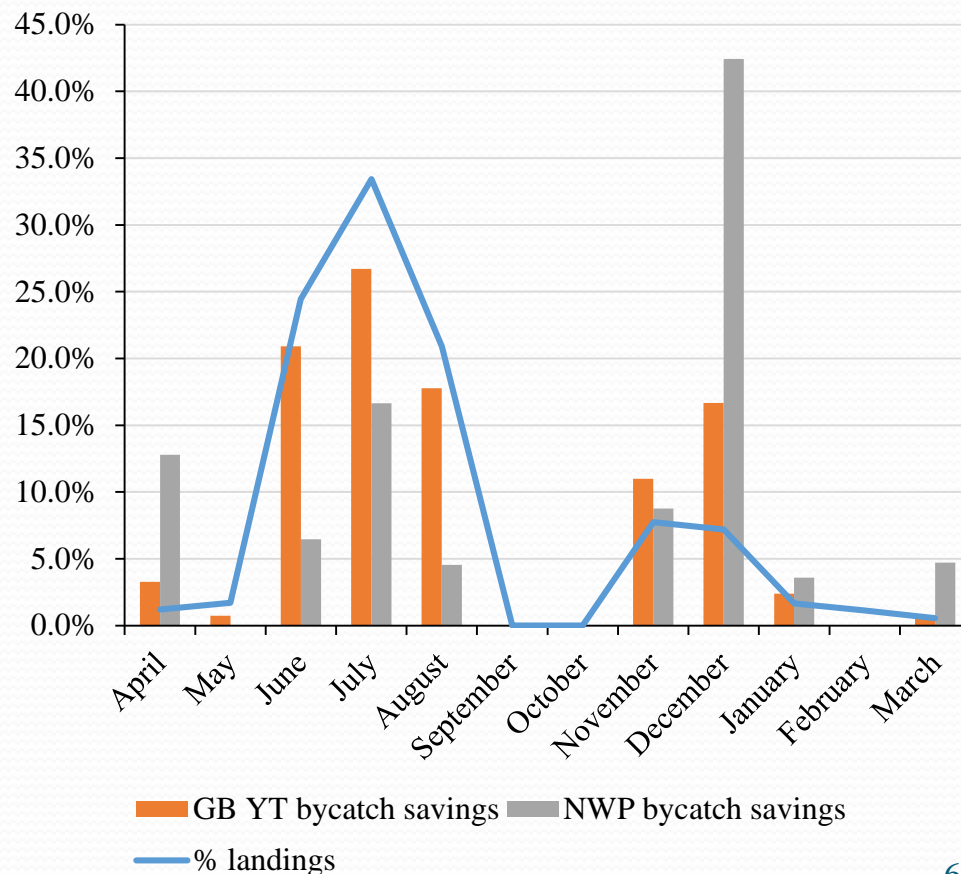
*not enough data to show CAII ext d/K Jan/Feb.

Bycatch savings analysis

Nov-Dec in CAIIAA/CAII-ext:

- Lower landings relative to summer months
- bycatch savings were generally higher

Figure 15. Monthly GB yellowtail and N. windowpane bycatch savings gained by not fishing Closed Area II AA. The blue line shows the percentage of landings from Closed Area II AA by month. Fishery data used were from 2013-2015.

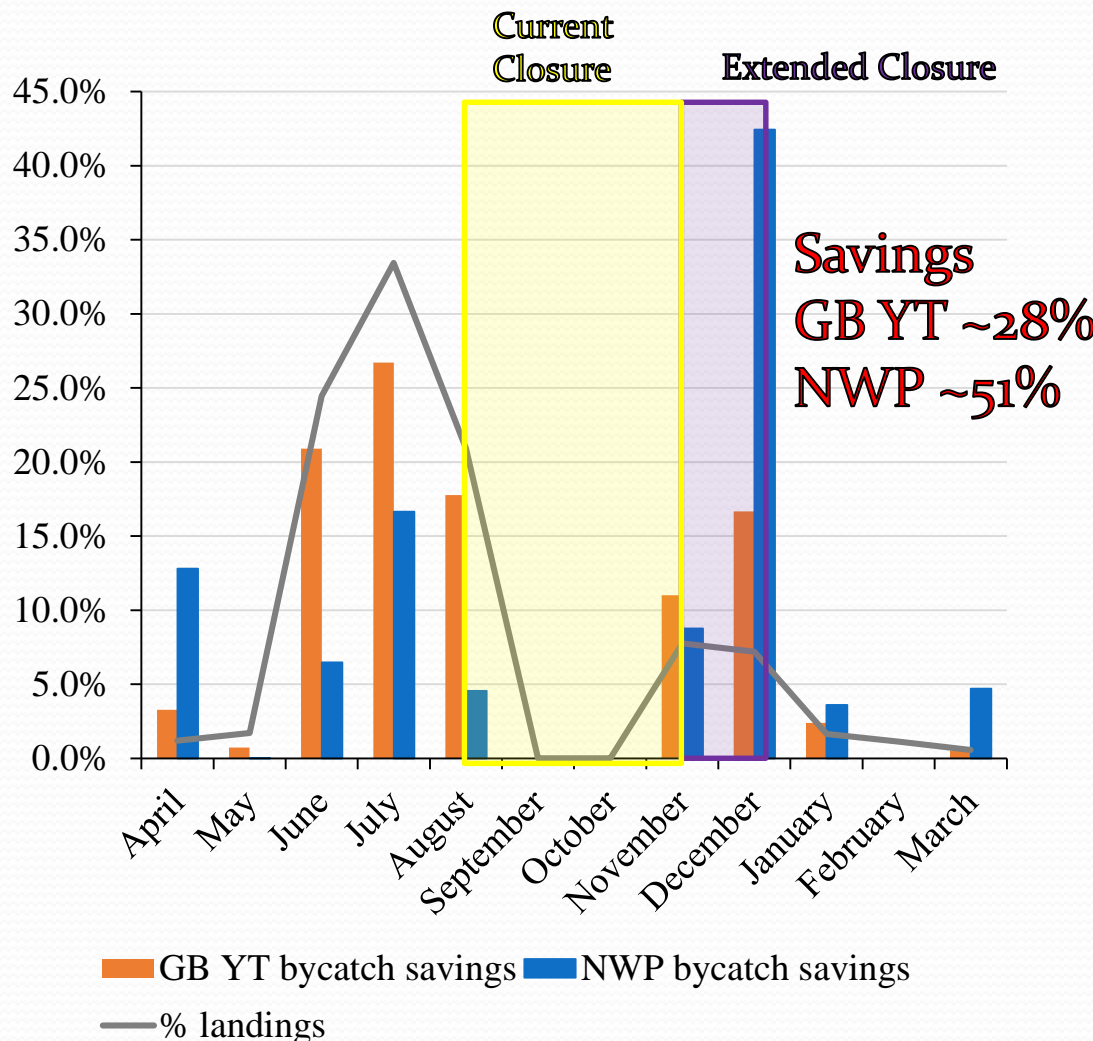


Extended closure in CAI and ext.

Extending current seasonal closure (Aug 15th – Nov 15th) to December 31st and include CAI extension.

Rationale:

1. Continuation of seasonal closure already in place.
2. NWP savings from closing Nov-Dec > using GRA year-round.
3. GBYT savings approximately the same as using GRA year-round.
4. Nov and Dec are highest GBYT d/K months in CAI ext.
5. Closure does not impact months with most effort (Jun-Aug)



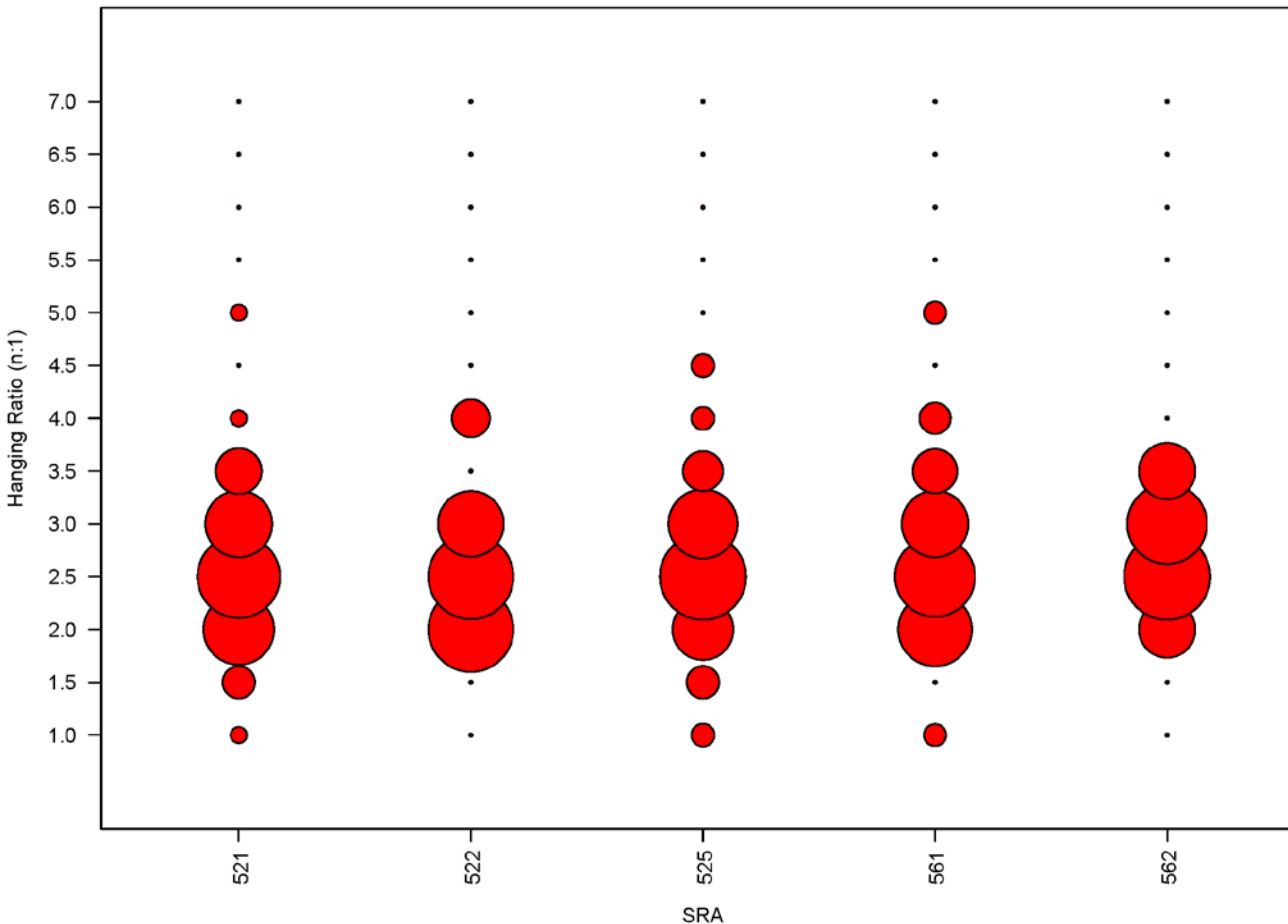
Observed Hanging Ratio

Bubble plots show proportions of obs. trips by hanging ratios (LA trips from 2008 to 2016).

- Maximum hanging ratio was used (to account for different HR's between dredges in same trip) → one HR value per trip
- Ratios rounded to nearest half integer (i.e. 1:1, 1.5:1, 2:1, etc.)

Hanging Ratio-GB OPEN (by SRA)

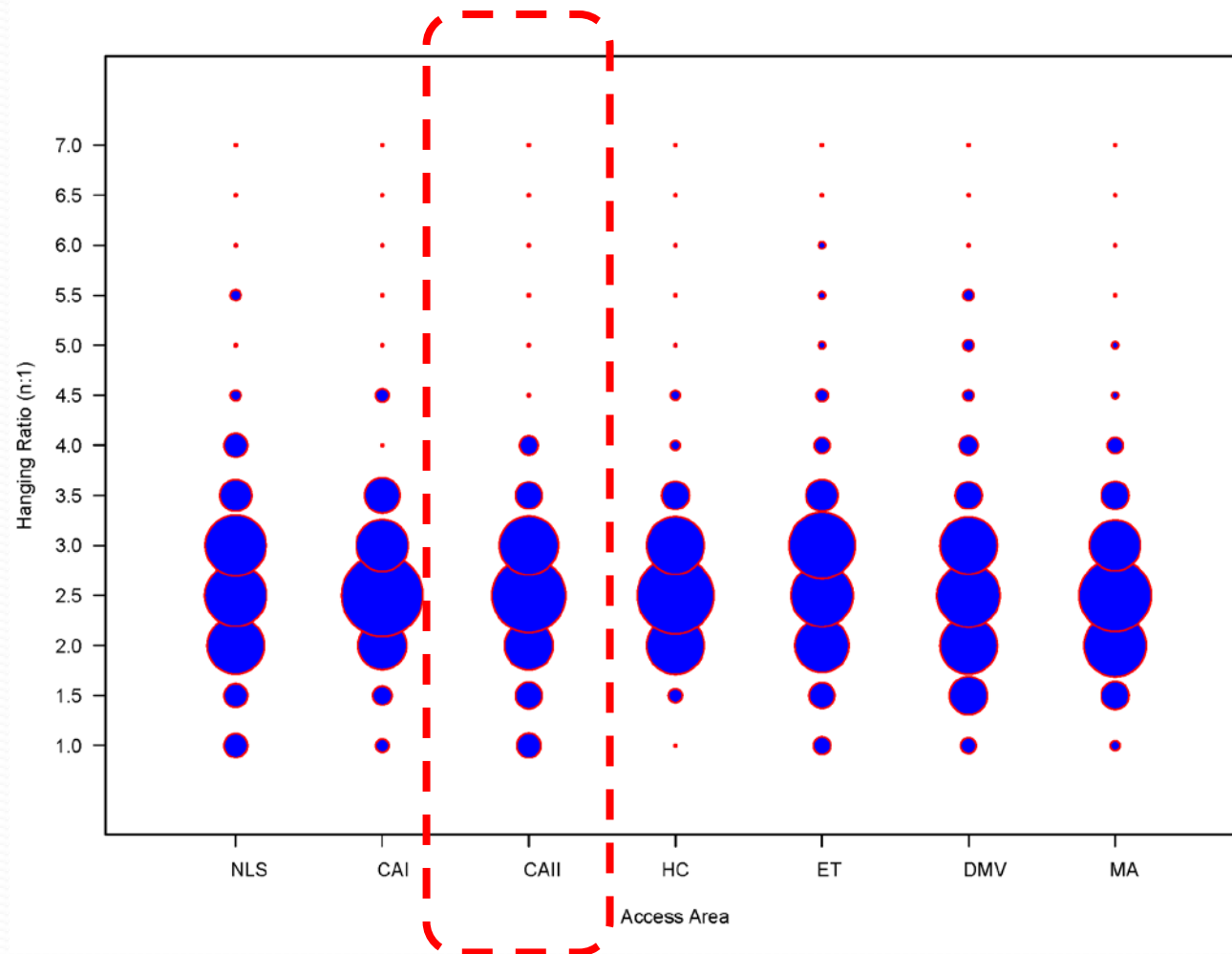
2008-2016



For observed open-area trips on GB:

- Majority of hanging ratio between 2:1 and 3:1
- Note that SRA 525/562 make up CAII-ext and SE part:
 - Majority of trips between 2:1 and 3:1

Observed Hanging Ratio, AA Trips (2008-2016)



Access area
fishing shows
similar HR as
open-area fishing

~ 2:1 to 3:1

Hanging ratio summary

- Existing analysis characterizes hanging ratios used by industry.
- Typical hanging ratio between 2:1 and 3:1 across fishery (including CAll AA, and open area of Georges Bank)

PDT discussion on GBYT

- Increasing observer coverage in CAll?
 - Typically 10-15%, this is reasonable for monitoring purposes
- Seasonal GRA with reduced hanging ratio?
 - Not much reduction by moving from 2:1 to 1.5:1
 - Difficult to enforce seasonal GRA
- **PDT recommendation: reconsider seasonal closure options for Closed Area II and Closed Area II extension that were developed in Framework 29**

Next steps

- PDT will review gear modification bycatch reduction study (CFF) at July 23, 2019 meeting

Today:

- AP/CTE input needed:
 - Should PDT develop time/area closure alternative? Additional alternatives can be developed after CFF presentation.
- Other ideas?



Shell Stocking Compliance Guide & Clarification of vessel replacement policy (GARFO)



Other Business